Evaluation of the Region 2 Drinking Water Laboratory Certification Program

by the

Office of Ground Water and Drinking Water Technical Support Center

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U. S. ENVIRONMENTAL PROTECTION AGENCY

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Introduction

The "Manual for the Certification of Laboratories Analyzing Drinking Water" requires the Office of Ground Water and Drinking Water (OGWDW) to "review the Regional drinking water certification programs annually and evaluate the resources and personnel available in each Region to carry out the certification program." Paper reviews in the form of questionnaires are done annually with on-site reviews conducted triennially. Jennifer Best and Michella Karapondo of the Technical Support Center (TSC) performed a Quality System Assessment (QSA) of the Region 2 Drinking Water Laboratory Certification Program on April 28 – 30, 2009 at the Region 2 office in Edison, NJ. The on-site evaluation is conducted to assess the adherence of the EPA Regional Certification Authority to the requirements of the "Manual for the Certification of Laboratories Analyzing Drinking Water," Chapters I – III, Fifth Edition, EPA 815-R-05-004, 2005. The QSA included a review of documents and discussions with Donna Ringel, Laboratory Certification Program Manager for Region 2.

Quality and Timeliness of State Laboratory Audits

Principal State Laboratory (PSL) audits for Chemistry, Microbiology and Radiochemistry are to be conducted on a 3-year cycle as described in the "Manual for the Certification of Laboratories Analyzing Drinking Water" (Laboratory Certification Manual or LCM). Along with PSL audits, assessment of the state laboratory certification program should be performed, as outlined in Chapter III of the LCM. The chart below gives the last dates audits were performed of the PSLs and drinking water laboratory certification programs for the states in Region 2:

| STATE | LAST AUDIT OF PRINCIPAL STATE CHEM LAB | LAST AUDIT OF PRINCIPAL STATE MICRO LAB | LAST AUDIT OF PRINCIPAL STATE RAD LAB | LAST DW LAB CERT PROGRAM AUDIT |
|-------|---|--|---|---|
| NY | Performed by FLDOH (TNI) September 2007 | Performed by FLDOH (TNI) September 2007 | Performed by FLDOH (TNI) September 2007 | April 2008; Region 2 participated as a part of the TNI AB evaluations |
| NJ | May 2006 | May 2006 | September 2006 | June 2008; Region 2 participated as a part of the TNI AB evaluations |
| PR* | April 2008 (wet chemistry) | April 2008 | No radiochemistry capacity | April 2008 |
| USVI | No chemistry capacity | April 2008 | No radiochemistry capacity | April 2008 |

^{*} PR maintains an agreement with a NELAP-accredited private laboratory to cover some chemical contaminants as well as radiochemical contaminants. Region 2 maintains certificates for the private lab

The Region 2 certification program is current with all PSL audits as well as certification program reviews. Audits of the New Jersey chemistry, microbiology, and radiochemistry PSLs will be delayed this year due to the relocation of the laboratory facilities. The audit team discussed the delay for these audits with Ms. Ringel, and agreed that it would be most efficient to grant New Jersey interim certification until the laboratory facilities are fully operational instead of performing two on-site audits for the laboratory facilities. A radiochemistry audit conducted by the OGWDW contractor will also be scheduled for New Jersey on completion of operational radiochemical analytical facilities.

Region 2 does not conduct independent on-site assessments of the PSL for state laboratories accredited by a recognized National Environmental Laboratory Accreditation Program (NELAP) accrediting body. For those PSLs, Region 2 uses the NELAP accreditation as a basis for EPA drinking water laboratory certification. Region 2 then issues a letter to that PSL recognizing them. The evaluation team noted that Ms. Ringel also inquires about regulated contaminants for which the PSL has no capabilities, to ensure that the State has made other arrangements to assure the availability of laboratory facilities certified for performing analyses of those contaminants. Such availability is a condition of primacy and Ms. Ringel is to be commended for her diligence in pursing that information. It is also apparent to the evaluation team that Region 2 carefully reviews the NELAP accreditations for the PSLs in their Region in using the NELAP information as basis for the Regional decision.

Reviews of State Certification Programs

On an annual basis, TSC sends a questionnaire to all of the Regional Laboratory Certification Program Managers (LCPMs) regarding the status of the drinking water laboratory certification program in the states within their Region. Ms. Ringel forwards this questionnaire to the states in Region 2. This questionnaire serves as an annual program review for the states in Region 2, while on-site evaluations of the state programs, conducted by the Region 2 laboratory certification program staff, occur on a triennial basis. The procedure for conducting these program reviews in outlined in the Region 2 SOP "Drinking Water Laboratory Certification Program Procedures", Revision 3, April 2008. As with the on-site evaluations of PSLs, the Region 2 laboratory certification program has kept on schedule, and has been conducting on-site program reviews every three years. The Region 2 SOP adequately details the elements reviewed at the on-site certification program reviews.

The SOP also notes that Region 2 does not conduct independent on-site evaluations of NELAP states' accreditation programs (NY, NJ). In lieu of an on-site for the NELAP-based programs, Region 2 obtains and reviews the NELAP evaluation report, and has sent a representative from Region 2 to serve as a member of the NELAP evaluation team.

Regional Certification Program Files

The OGWDW evaluation team reviewed files from the four states and territories within Region 2. We found Region 2 to have very well organized and complete files for each of the states. The evaluation team does recommend that email correspondence with state counterparts be regularly included in the files, particularly when it deals with policy or regulatory interpretation.

Communications with State Counterparts

Region 2 held a triennial meeting on April 29 in conjunction with the TSC program review. The meeting was well organized and attended by several representatives from the PSLs and certification programs of New York, US Virgin Islands, Puerto Rico and New Jersey, as well as many Region 2 employees. Region 2 is to be commended for putting together an agenda of interesting, relevant topics that stimulated discussion and interaction by the attendees. Region 2 also hosted ethics training in 2007. Region 2 does not hold annual meetings for state Certification Officers, but does remain in frequent contact with the certification programs for the States within the Region. OGWDW does recommend that the Regions hold annual meetings with state Certification Officers (COs). It is preferred that these meetings be held in person, but an annual conference call is acceptable.

Ms. Ringel has greatly improved communication with the NELAP accreditation programs since the last TSC program review and is to be commended for doing so.

Resources

Region 2 is to be commended for its strong support of the drinking water laboratory certification program through both personnel and travel resources. Region 2 utilizes expertise from the Division of Environmental Science and Assessment (DESA) to perform the audits of PSLs. The DESA experts have completed the initial certification officer training offered in Cincinnati, but it has been as much as ten years since they did so. The audit team strongly recommends refresher training at least every 5 years. This is particularly important for the Region 2 microbiology CO, Deborah Kay, as there have been many new methods and regulations for microbiological contaminants in recent years.

RECOMMENDATIONS:

- Include a checklist in the SOP titled "Drinking Water Laboratory Certification Program Procedures" for both the certification program review and the PSL audits.
- Conduct an annual meeting of State and Regional certification officers within Region 2 either in person or via teleconference.
- Send Certification Officers, particularly Region 2's microbiology CO, for refresher training as soon as is practical and at least every 5 years thereafter.

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Mangle Car Q

Jennifer M. Best, OGWDW, TSC

Michella Karapondo, OGWDW, TSC